



Grosafe[®]

FreeFlo[®] Copper

FRUIT, VEGETABLES & ROSES

A protectant fungicide for the control of a range of fungal and bacterial diseases on fruit, vegetables and roses

- LESS COPPER - MORE PROTECTION
because of its smaller particle size, it has improved bioavailability.
- Quality formulation resulting in problem free handling, mixing and application
- Better protection from fungal diseases and bacterial pathogens
- Superior rainfastness and persistence due to its fine particle size*
- Better coverage and longevity*
- Increased dispersion and suspension properties*
- Easy to measure and handle
- Excellent crop safety

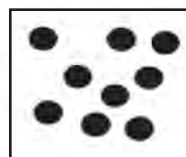


*Supporting data available from Grosafe

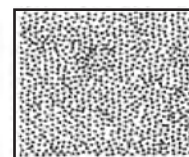
HOW FREEFLO® COPPER WORKS

FreeFlo® Copper active is Copper Hydroxide 300g/kg. These crystals adhere to the leaf surface and act as ion reservoirs, continuously releasing Cu⁺⁺ ions, forming a protective barrier that prevents infection.

The smaller the particle size, the better the coverage on the plant surface. The mean particle size of 1.711 microns has a direct effect on coverage, tenacity of the product and ultimate fungicidal activity and suspension in the spray tank.



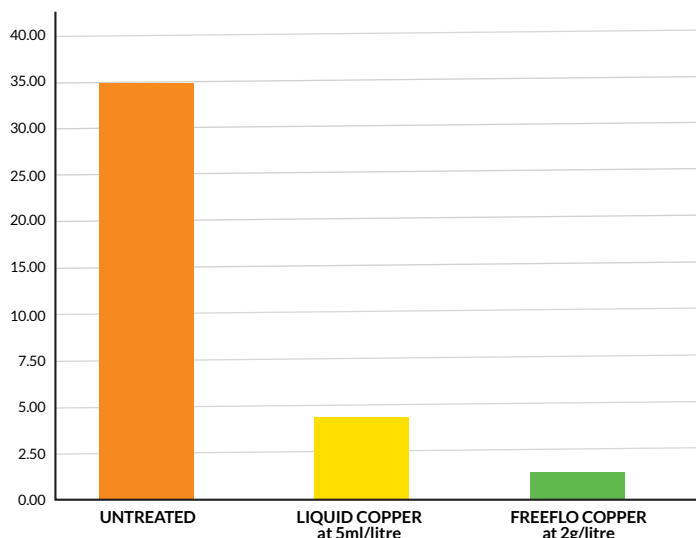
7 microns (9)
Copper Hydroxide Competitors



1.711 microns (1500)
FreeFlo Copper

FreeFlo® Copper has a more even particle size, which makes it easier to retain more to the treated leaf surface and thus increase the level of bio-available Cu⁺⁺ ions for disease prevention, Grosafe Chemicals has developed an improved formulation with a smaller micron sized particle. Small particles form copper complexes which are retained on the sprayed surface to provide an added source of copper ions for increased pathogen control.

Black Spot Leaf - % Average incidence across trials conducted and assessed in 2023



The trials were conducted on roses to assess control of black spot. These results confirm how effective copper hydroxide is, with its smaller particle size, giving a superior coverage on plant surfaces enhancing the elimination of undesirable fungal spores and bacterial diseases.

Untreated Blackspot average at 35%
Liquid Copper Blackspot average at 4%
FreeFlo® Copper Blackspot average at 1.5%

Peak Research 2022 - 2023 Rose

Controls a wide range of fungal and bacterial diseases:

- anthracnose
- angular leaf spot
- bacterial blast
- bacterial blight
- bacterial speck
- black spot
- bladder plum
- botryosphaeria
- brown rot
- cane spot
- cane wilt
- downy mildew
- early blight
- fire blight
- grease spot
- late blight
- leaf spot
- leaf curl
- melanose
- phomopsis sp.
- pine needle blight
- septoria spot
- stemphylium
- verrucosis
- bacterial spot
- spur blight

MIXING INSTRUCTIONS: Add water to the sprayer then measure out the required amount of FreeFlo® Copper using the directions on the label. Mix thoroughly and use up all the spray mix within 24 hrs.

DIRECTIONS FOR USE: Ensure good coverage of foliage.

CROP	DISEASE	RATE g/10 L	APPLICATION RATE, TIMING
Apples	Black Spot	11	Full cover spray. Apply between silver tip and green tip (max 1cm green tip)
Citrus	Melanose, Verrucosis	4.5 - 9	Apply before and after blossom
	Brown Rot	9 - 11	Apply in Autumn to the skirts of the trees, to a height of 1 metre, to the drip line and 50 cm beyond. Use higher rate if conditions favour disease.
Feijoas	Leaf Spot	7 - 9	Repeat as necessary
Roses	Black Spot	10	Apply at first signs of new growth then at 14 day intervals depending on weather conditions. Do NOT use a spray adjuvant.
Stone Fruit	Leaf Curl, Shot Hole, Bladder Plum	11	Apply when buds are swelling, within one week before buds open, with a second application of 11.5 g/10 litres water, 10 - 14 days later.
	Bacterial Blast	31	Apply at leaf fall and repeat every 4 weeks until bud movement, then treat as for Leaf Curl.

See product label for full list of crops and diseases



20 Jean Batten Drive, Mt Maunganui, 3116 | 0800 220 002 | orders@grosafe.co.nz | www.grosafe.co.nz

FreeFlo® is a registered trademark of Grosafe Chemicals Ltd.
Registered pursuant to the ACVM Act 1997 FreeFlo Copper No. P9918